

We are pleased to provide you with the 2015 Water Quality Report. This report is designed to inform you of the quality of water we delivered to you over the past year. Our goal is to provide you a safe and dependable supply of drinking water. Our wells draw from the Port Deposit Gneiss aquifer in Harford County. An aquifer is a geological formation that contains water. We also purchase water from the Harford County Water System. Harford County draws water from several sources. The Perryman Water Plant draws water from the Potomac group aquifer. The Abingdon Water Plant draws surface water from the Susquehanna River or the Loch Raven Reservoir and the County's Havre de Grace Water Plant draws water from the Susquehanna River.

Source Water Assessment (SWA) - The Maryland Department of the Environment has completed a SWA for the water system. The source for Greenridge Utilities water supply is an unconfined, Piedmont aquifer known as the Port Deposit Gneiss. The SWA area for the Greenridge Utilities wells were delineated using U.S. EPA approved methods specifically designed for each source. Potential sources of contamination within the assessment area were identified based on site visits, database reviews, and land use maps. Well information and water quality data were also reviewed. Figures showing land use and potential contaminant sources within the SWA area and an aerial photograph of the well locations are enclosed in the full (SWA) report. The susceptibility analysis of the Greenridge Utilities water supply was based on the review of the water quality data, potential sources of contamination, aquifer characteristics, and well integrity. It was determined that the Greenridge Utilities water supply is susceptible to contamination by nitrates, and radionuclides, but is not susceptible to volatile organic compounds (VOCs), synthetic organic compounds (SOCs), microbiological contaminants, and other regulated inorganic compounds (IOCs). If you would like to review the report or have any other questions or concerns regarding it please call our office at (844) 310-6660.



Help put a stop to the more than **1 trillion gallons of water lost annually** due to household leaks. These easy-to-fix leaks waste the average family the amount of water used to fill a backyard swimming pool each year.

Plumbing leaks can run up your family's water bill an extra 10 percent plus, but chasing down these water- and money-wasting culprits is as easy as 1-2-3. Simply check, twist, and replace your way to fewer leaks and more water savings:

- <u>Check</u> for silent leaks in the toilet with a few drops of food coloring in the tank, and check your sprinkler system for winter damage.
- <u>Twist</u> faucet valves; tighten pipe connections; and secure your hose to the spigot. For additional savings, twist a WaterSense labeled aerator onto each bathroom faucet to save water without noticing a difference in flow. They can save a household more than 500 gallons each year—equivalent to the amount water used to shower 180 times!
- Replace old plumbing fixtures and irrigation controllers that are wasting water with WaterSense labeled models that are independently certified to use 20 percent less water and perform well.

## Message From Steve Lubertozzi, President

Dear Greenridge Utilities Customers,

I am pleased to share your Annual Water Report for 2015. As the local President of your community water utility, this direct communication is part of our continuing effort to emphasize to our customers that we understand "water is local."

Our team is committed to providing safe, reliable and cost effective service to our customers. All of our employees share in our commitment to act with integrity, protect the environment, and enhance the local community.

We are proud to share this report which is based on water quality testing through December 2015. You will find that we supply water that meets or exceeds all federal and state water quality regulations.

These results don't happen by chance. Our dedicated local team of water quality experts is working in the community everyday ensuring that you, our customer, are our top priority and providing the highest quality drinking water and service - now and in the years to come.

Best regards,







Sign up for e-billing now at www.uiwater.com

The Safe Drinking Water Act was passed in 1974 due to congressional concerns about organic chemical contaminants in drinking water and the inefficient manner by which states supervised and monitored drinking water supplies. Congress' aim was to assure that all citizens served by public water systems would be provided high quality water. As a result, the EPA set enforceable standards for health-related drinking water contaminants. The Act also established programs to protect underground sources of drinking water from contamination.

#### **EPA Wants You To Know:**

The sources of drinking water; both tap water and bottled water; include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- (i) Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (ii) Inorganic contaminants, such as salts and metals, that may be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (iii) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (iv) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.
- (v) Radioactive contaminants, which may be naturally-occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. FDA regulations establish limits for contaminants in bottled water that shall provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Greenridge Utilities, Inc. is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

The Environmental Protection Agency requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the tables below are the only contaminants detected in your drinking water.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alquien que lo entienda bien.

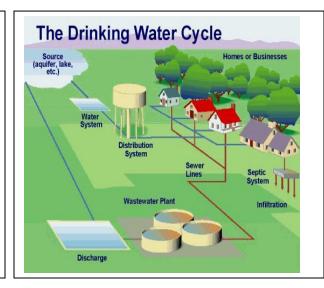


We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

<u>Drain Disposal Information</u>: Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. A common cause is sewer pipes blocked by grease, which gets into the sewer from household drains. Grease sticks to the insides of pipes. Over time, the grease can build up and block the entire pipe. Help solve the grease problem by keeping this material out of the sewer system in the first place:

- Never pour grease down sink drains or into toilets. Scrape grease into a can or trash.
- Put strainers in sink drains to catch food scraps/solids for disposal.

Prescription Medication and Hazardous Waste - Household products such as paints, cleaners, oils, and pesticides, are considered to be household hazardous waste. Prescription and over-the-counter drugs poured down the sink or flushed down the toilet can pass through the wastewater treatment system and enter rivers and lakes (or leach into the ground and seep into groundwater in a septic system). Follow the directions for proper disposal procedures. Don't flush hazardous waste or prescription and over-the-counter drugs down the toilet or drain. They may flow downstream to serve as sources for community drinking water supplies. Many communities offer a variety of options for conveniently and safely managing these items. For more information, visit the EPA website at: http://www.epa.gov/epawaste/conserve/materials/hhw.htm



#### **Understanding This Report:**

In order to help you understand this report, we want you to understand a few terms and abbreviations that are contained in it

- Not Applicable (N/A) Information not applicable/not required for that particular regulated contaminant.
- Non Detects (ND) laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used
- Standard units (S.U.) standard units is a measurement of that particular regulated contaminant.
- Compliance Level (CL) Is the value used to determine compliance with MCL or TT. The CL for contaminants can be a maximum test value, an average, or meeting a condition for a certain percentage of the time.
- Treatment Technique (TT) a required process intended to reduce the level of a contaminant in drinking water.
- Intestinal Parasites Microorganisms like Cryptosporidium and Giardia lamblia can cause gastrointestinal illness (e.g., diarrhea, vomiting, cramps). In 2004, two samples of untreated river water showed the presence of Giardia lamblia and Cryptosporidium. None were found in the treated drinking water.
- Parts per million (ppm) or milligrams per liter (mg/l) one part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion (ppb) or micrograms per liter (ug/l) one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
- Parts per trillion (ppt) or Nanograms per liter (nanograms/L) one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- Picocuries per liter (pCi/L) picocuries per liter is a measure of the radioactivity in water.
- Action level (AL) action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum contaminant level (MCL) The maximum contaminant level is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- Maximum contaminant level goal (MCLG) The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Maximum Residual Disinfectant Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
- Nephelometric Turbidity Unit (NTU) nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Our system received monitoring waivers for: cyanide, nitrite, asbestos, and combined uranium.

Greenridge Utilities, Inc. routinely monitors for contaminants in your drinking water according to Federal and State laws. Unless otherwise noted, the tables that follow show the results of our monitoring for the period of January 1st to December 31st, 2015. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for organic contaminants], though representative, are more than one year old. Data obtained before January 1, 2015 and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

#### If You Have Questions Or Want To Get Involved?

Greenridge Utilities, Inc. does not currently hold regular public meetings. Should the Utility hold a public meeting, you will be notified through the mail or public notice. Please call customer service at (844) 310-6660 if you have any questions. You may also call Talad Said or Allen Webb at (410) 638-3939 for questions on the Harford County test results or visit <a href="http://www.harfordcountymd.gov/dpw/ws/">http://www.harfordcountymd.gov/dpw/ws/</a> [choose <a href="http://www.harfordcountymd.gov/dpw/ws/">Water Quality Report</a>] for additional information. We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

## **Greenridge Utilities, Inc. Analytical Results**

**Lead and Copper Contaminants** 

Contaminant (units)	Sample Date	Violation Y/N	Your Water	# of sites found above the AL or Range Low High	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90 <sup>th</sup> percentile)	2014	No	0.24	Low High	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**Inorganic Contaminants** 

Contaminant (units)	Sample Date	Violation Y/N	Highest Level Detected	Range Low High	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen) (ppm)	2015	No	6	3.1-6.12	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium (ppm)	2013	No	0.007	0.0053- 0.007	2	2	Discharge of drilling; Discharge from metal refineries; Erosion of natural deposits

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Disinfectants & Disinfection By-Product Contaminants

Contaminant (units)	Date	MCL/MRDL Violation Y/N	Highest Level Detected	Range Low High	MCLG	MCL	Likely Source of Contamination
HAA5 (ppb) [Total Haloacetic Acids]	2015	No	20	9.6-30.35	N/A	60	By-product of drinking water chlorination
TTHM (ppb) [Total Trihalomethanes]	2015	No	31	30.3-31.48	N/A	80	By-product of drinking water chlorination
Chlorine (ppm)	2015	No	1.1	0 – 1.1	MRDLG = 4	MRDL = 4	Water additive used to control microbes

<u>Secondary Contaminants</u> are substances that affect the taste, odor, and/or color of drinking water. These aesthetic contaminants normally do not have any health effects and normally do not affect the safety of your water.

### **Water Characteristics Contaminants**

Contaminant (units)	Sample	Your	Range	Secondary
	Date	Water	Low/High	MCL
Sodium (ppm)	2013	72	48 - 72	N/A

# Harford County DPW - 2015 CCR Contaminant Information

Contaminants	AL	90th%	# Samples > AL	Violation	Typical Source
Copper (ppm) (2014)	1.3	0.25	0	No	Erosion, corrosion of plumbing, wood preservatives.
Lead (ppb) (2014)	15	ND	0	No	Erosion of natural deposits, corrosion of plumbing.

Contaminants	MCLG	MCL	CL	Range		Violation	Typical Source
				Low	High		
Disinfectants & Disinfection By-P	roducts					1	<u> </u>
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	2.9	0.2	2.9	No	Water additive to control microbes. Avg. 1.5
HAA5 (Total Haloacetic Acids) (ppb) For 2014 & 2015	N/A	60	22	5	45	No	By-product of drinking water chlorination. CL = rolling yearly average by quarter.
TTHMs (Total Trihalomethanes) (ppb) For 2014 & 2015	N/A	80	27	8	50	No	By-product of drinking water chlorination. CL = rolling yearly average by quarter.
Inorganic Contaminants	<u> </u>		-I				
Barium (ppm)	2	2	0.09	0.03	0.09	No	Discharge of drilling wastes, Discharge from metal refineries, Erosion of natural deposits.
Chromium (ppb)	100	100	2.1	ND	2.1	No	Discharge from steel and pulp mills, Erosion of natural deposits.
Fluoride (ppm)	4	4	1.1	ND	1.1	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories. Avg. 0.6
Nitrate (ppm as Nitrogen)	10	10	4.1	1.3	4.1	No	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits.
Microbiological Contaminants	<u>'</u>		•	II.		•	
Total Coliform (5% positive in a month)	0	5%	1%	0%	1%	No	Naturally present in the environment. 1 positive out of 1206 samples. Retest was negative.
Turbidity (NTU) TT $\leq$ 0.3 in 95% of samples in a month. Never $>$ 1.0	N/A	TT	100%	0.01	0.45	No	From soil runoff. Average 0.5 NTU.
Organic Contaminants	<u>'</u>		•	•			
Atrazine (ppb)	3	3	0.2	ND	0.2	No	Runoff from herbicide use on row crops
Simazine (ppb)	4	4	0.1	ND	0.1	No	Herbicide runoff.
Di(2-ethylhexyl) phthalate (ppb)	0	6	1.0	ND	1.0	No	Discharge from rubber and chemical factories
Total Organic Carbon (ppm)	N/A	TT	CL by % ren to 1.7	noval Ran	ge 0.6	No	TOC has no health effects, but can provide a medium for formation of disinfection byproducts.
Radioactive Contaminants	L		L				
Combined Radium (226&228) (pCi/L) (2014)	0	5	2	2	2	No	Erosion of natural deposits.
Gross Alpha (pCi/L) (2014)	0	15	5.8	5.8	5.8	No	Erosion of natural deposits.
Gross Beta (pCi/L) (2014)	0	50	4.3	4.3	4.3	No	Decay of natural and man-made deposits.

Unregulated parameters are monitored in order to assist EPA in determining where certain contaminants occur and whether additional regulations may be necessary:

Unregulated Contaminants	Avg.	Low	High	Typical Source
Manganese (ppm)	0.01	ND	0.02	Erosion of natural deposits.
Sodium (ppm)	35	15	71	Sodium salts used in water treatment for pH adjustment
Sulfate (ppm)	33	ND	41	Used in production of fertilizers, fungicides, insecticides.
Tert-Butyl Alcohol (ppb)	2.8	ND	8.4	Gasoline additive, paint remover ingredient